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MASS REARING CAGES BUREAU OF

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In certain phases of the introduction of hessian fly parasites, hessian flies were needed in quantity. Two cages were devised to collect them as they emerged from field material, one from the green wheat in the fall and the second from summer stubble.

Inasmuch as the cages served the dual purpose of collecting both the host insect and the parasites from infested material, it is believed that these cages may be adaptable for recovering other types of insects.

The cages are, primarily, tightly constructed boxes of any suitable size (ours were 1 by 2 by 4 feet), open at the bottom, with a tight-fitting hinged cover on top. The principal feature is a battery of easily removable mason jars into which the insects fly upon emergence.

With an extension bit, holes were bored about 8 inches apart along the top of one side of the cage. These were cut to receive snugly the collar of a "self seal" mason jar cover. With a pair of tin snips two cuts about one-fourth inch apart were made in opposite sides of the shoulder of the collar. After the collar was fitted in the bored hole these 1/4-inch sections were bent away from the collar and tacked to the inside of the cage, thus anchoring it more securely. The disk of the "self seal" cap may be used to cover the jars upon removal from the cage to prevent insects from escaping.

The insides of both cages and the lower half of the stubble cage were painted with asphaltum. The remainder of each cage was painted with a weather-proof white paint.

The stubble cage (fig. 1) was placed in a suitable location on the ground, banked with soil around the bottom, and the stubble placed within. The moisture from the soil was sufficient to keep the material in a favorable condition for emergence of insects.

In the cage used for the green fall wheat (fig. 2) a 1/4-inch mesh hardware cloth floor was fastened about 1-1/2 inches from the bottom, and the entire cage set in a close-fitting galvanized iron pan with 1-inch sides. This hardware cloth floor permitted air to circulate around the green plants, thus preventing decay. Water was added to the pan as needed.

Fluctuations in temperature may necessitate the use of blotting paper in the jars to absorb the water of condensation.

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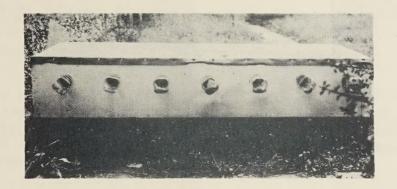


Figure 1.—Cage used for summer material.

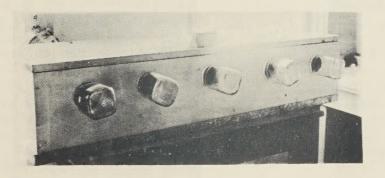


Figure 2.-Cage used for green fall material.